

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61M5/152 A61M5/168

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 979 055 A (DE BEER EDWIN J ET AL) 11 April 1961 (1961-04-11)	1-5,7,20
Y	column 2, lines 11-50; figure 1	6
X	US 3 252 623 A (CORBIN THOMAS H ET AL) 24 May 1966 (1966-05-24)	1-5,7,20
Y	column 2, line 59 - column 3, line 10; figure 1	6
Y	US 2002/045856 A1 (JAAFAR ALI ET AL) 18 April 2002 (2002-04-18) abstract	6
X	EP 0 947 208 A (AUBEX CORP) 6 October 1999 (1999-10-06)	1,2,8-15
Y	paragraphs '0020! - '0029!; figures 1,2	16
A		3-7, 17-22
	----- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

20 December 2004

Date of mailing of the international search report

10.01.2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 386 929 A (PEERY JOHN R ET AL) 7 June 1983 (1983-06-07)	1,2,8-15
Y	column 1, line 67 - column 2, line 16; figures 1,2	16
A		3-7, 17-22
X	----- EP 0 885 620 A (LEE YOUNG GYU) 23 December 1998 (1998-12-23)	1,2,8-15
Y	column 3, line 43 - column 5, line 28; figures 1,2a	16
A		3-7, 17-22
X	----- US 4 976 687 A (MARTIN JAMES) 11 December 1990 (1990-12-11)	1-9,14, 15,17, 18,20-22
Y		16,19
A	column 6, line 4 - column 7, line 19; figure 7	10-13
X	----- US 2003/018304 A1 (SAGE BURTON H) 23 January 2003 (2003-01-23)	1-9,17, 20-22
A	paragraphs '0015!, '0025! - '0029!; figure 1	10-16, 18,19
X	----- WO 88/00841 A (KEOGH EDWARD JOHN) 11 February 1988 (1988-02-11)	1-8,17, 18,20-22
Y	page 2, lines 6-37; figures 1-3	16,19
A		9-15
X	----- US 4 673 389 A (SLAKER FRANK A ET AL) 16 June 1987 (1987-06-16)	1,2,4-7, 17,18,20
Y		16,19
A	column 2, line 27 - column 4, line 12; figure 1	3,8-15, 21,22
Y	----- GB 2 309 801 A (MEDET LTD) 6 August 1997 (1997-08-06)	19
	page 8, paragraph 2 -----	

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2979055	A	11-04-1961	GB 769876 A	13-03-1957
US 3252623	A	24-05-1966	DE 1548916 A1	20-01-1972
			FR 1487624 A	07-07-1967
			GB 1116548 A	06-06-1968
			NL 6610358 A	23-01-1967
US 2002045856	A1	18-04-2002	US 2004162515 A1	19-08-2004
EP 0947208	A	06-10-1999	JP 11285530 A	19-10-1999
			DE 69918587 D1	19-08-2004
			EP 0947208 A2	06-10-1999
US 4386929	A	07-06-1983	US 4318400 A	09-03-1982
			AR 223752 A1	15-09-1981
			AT 24666 T	15-01-1987
			AU 535730 B2	05-04-1984
			AU 6614381 A	23-07-1981
			BR 8100242 A	04-08-1981
			CA 1165199 A1	10-04-1984
			CA 1183749 A2	12-03-1985
			DE 3175789 D1	12-02-1987
			EP 0032792 A2	29-07-1981
			EP 0172586 A1	26-02-1986
			ES 265204 Y	16-01-1984
			ES 270885 Y	16-11-1984
			IL 61891 A	30-12-1983
			JP 1817998 C	27-01-1994
			JP 3055142 B	22-08-1991
			JP 56102252 A	15-08-1981
			MX 153175 A	15-08-1986
			MX 159195 A	27-04-1989
EP 0885620	A	23-12-1998	KR 262930 B1	01-08-2000
			AT 264123 T	15-04-2004
			AU 750399 B2	18-07-2002
			AU 7197698 A	24-12-1998
			CA 2241075 A1	19-12-1998
			CN 1211453 A	24-03-1999
			DE 69823097 D1	19-05-2004
			DK 885620 T3	09-08-2004
			EP 0885620 A2	23-12-1998
			HK 1016825 A2	29-10-1999
			IL 124950 A	12-01-2003
			JP 11009689 A	19-01-1999
			PT 885620 T	31-08-2004
			SG 67514 A1	21-09-1999
			US 6024724 A	15-02-2000
US 4976687	A	11-12-1990	NONE	
US 2003018304	A1	23-01-2003	US 2004019321 A1	29-01-2004
WO 8800841	A	11-02-1988	AU 7800187 A	24-02-1988
			WO 8800841 A1	11-02-1988
US 4673389	A	16-06-1987	AU 575700 B2	04-08-1988
			AU 5000785 A	05-06-1986

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4673389	A	CA 1251110 A1 DE 3580093 D1 EP 0184391 A2 ES 290331 U HK 26391 A JP 61131755 A KR 9200438 B1 SG 14991 G US 4637817 A US 4714463 A	14-03-1989 15-11-1990 11-06-1986 01-08-1986 19-04-1991 19-06-1986 14-01-1992 21-06-1991 20-01-1987 22-12-1987
GB 2309801	A	06-08-1997	NONE